

Title (en)

Method of making optical waveguide preforms.

Title (de)

Verfahren zur Herstellung von Vorformen für optische Wellenleiter.

Title (fr)

Procédé de fabrication de préformes de guide d'ondes.

Publication

EP 0604785 A1 19940706 (EN)

Application

EP 93119584 A 19931206

Priority

US 99720492 A 19921228

Abstract (en)

In the mfr. of a preform from which optical waveguide fibre is drawn is provided. In this method a first soot stream and a second soot stream are separately formed and then directed to and collected on a mandrel. The streams are produced by oxidising separately generated vapour flows at first and second oxidation sites. The flow to the first site contains at least a first precursor (I) and that to the second site contains at least a second precursor (II) but not (I). Also claimed is a method where first and second vapour flows are oxidised into separate first and second soot particle streams. The first vapour flow contains at least (I) and (II). The second vapour flow contains at least (II) but not (I). Pref. (I) is a cpd, which forms SiO₂ on oxidn, a metal halide or an organometallic cpd or a combination of precursors for SiO₂ and GeO₂ which combination is formed before delivering the first vapour flow to the oxidn. site. (II) contains precursors for at least one of GeO₂, TiO₂, rare earth oxide or other meal oxides. (II) is a beta-diketonate complex.

IPC 1-7

C03B 37/014

IPC 8 full level

C03B 37/018 (2006.01); **C03B 8/04** (2006.01); **C03B 37/014** (2006.01); **G02B 6/00** (2006.01)

CPC (source: EP KR US)

C03B 37/01413 (2013.01 - EP US); **C03B 37/0142** (2013.01 - EP KR US); **C03B 37/018** (2013.01 - KR); **C03B 2201/31** (2013.01 - EP US); **C03B 2201/34** (2013.01 - EP KR US); **C03B 2201/36** (2013.01 - EP US); **C03B 2207/06** (2013.01 - EP US); **C03B 2207/12** (2013.01 - EP KR US); **C03B 2207/20** (2013.01 - EP KR US); **C03B 2207/28** (2013.01 - EP US); **C03B 2207/32** (2013.01 - EP US); **C03B 2207/50** (2013.01 - EP US)

Citation (search report)

- [Y] EP 0103448 A2 19840321 - CORNING GLASS WORKS [US] & US 4501602 A 19850226 - MILLER STEPHEN B [US], et al
- [DA] US 5141549 A 19920825 - TUMMINELLI RICHARD P [US]
- [A] EP 0154500 A2 19850911 - NIPPON TELEGRAPH & TELEPHONE [JP]
- [A] EP 0105739 A1 19840418 - CORNING GLASS WORKS [US] & US 4639079 A 19870127 - POWERS DALE R [US]
- [A] EP 0443112 A1 19910828 - CORNING INC [US] & US 5140665 A 19920818 - BACKER MARCELLA R [US], et al
- [A] EP 0018068 A1 19801029 - CORNING GLASS WORKS [US] & US 4314837 A 19820209 - BLANKENSHIP MICHAEL G
- [A] EP 0471139 A2 19920219 - CORNING INC [US] & US 5043002 A 19910827 - DOBBINS MICHAEL S [US], et al
- [A] EP 0443781 A1 19910828 - AMERICAN TELEPHONE & TELEGRAPH [US] & US 5123940 A 19920623 - DIGIOVANNI DAVID J [US], et al
- [XY] PATENT ABSTRACTS OF JAPAN vol. 13, no. 283 (C - 612) 28 June 1989 (1989-06-28)
- [X] PATENT ABSTRACTS OF JAPAN vol. 7, no. 39 (C - 151) 17 February 1983 (1983-02-17)
- [X] PATENT ABSTRACTS OF JAPAN vol. 12, no. 59 (C - 478) 23 February 1988 (1988-02-23)
- [X] PATENT ABSTRACTS OF JAPAN vol. 12, no. 59 (C - 478) 23 February 1988 (1988-02-23)
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 96 (C - 812) 7 March 1991 (1991-03-07)
- [A] PATENT ABSTRACTS OF JAPAN vol. 6, no. 85 (C - 103) 22 May 1982 (1982-05-22)
- [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 14 (C - 146) 20 January 1983 (1983-01-20)
- [A] PATENT ABSTRACTS OF JAPAN vol. 6, no. 143 (C - 117) 3 August 1982 (1982-08-03)

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

US 5296012 A 19940322; AU 5250093 A 19940707; AU 662851 B2 19950914; CA 2109474 A1 19940629; CN 1052964 C 20000531; CN 1090258 A 19940803; DE 69323980 D1 19990422; DE 69323980 T2 19991014; EP 0604785 A1 19940706; EP 0604785 B1 19990317; JP H06234537 A 19940823; KR 100286271 B1 20010416; KR 940015542 A 19940721; TW 246749 B 19950501

DOCDB simple family (application)

US 99720492 A 19921228; AU 5250093 A 19931220; CA 2109474 A 19931028; CN 93121595 A 19931228; DE 69323980 T 19931206; EP 93119584 A 19931206; JP 34118293 A 19931213; KR 930030045 A 19931227; TW 82109206 A 19931029